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RWANDA COFFEE INDUSTRY VALUE CHAIN ANALYSIS

PROFILING THE ACTORS, THEIR INTERACTION, COSTS CONTRATS AND OPPORTUNITIES

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CONTENTS

1.0 Introduction

- The transformation of Rwanda's coffee sector has happened relatively quickly. In 2000, Rwandan farmers were producing semi-processed coffee for sale on world markets. Farm gate prices paid to farmers were low and the prospects for farmers and exporters to increase income or profits were limited. Since the late 1990s the government has liberalized the sector, removing a variety of barriers to trade, creating new incentives for groups and individuals to invest in coffee production and facilitating entrepreneurship in the coffee industry.

- Today, Rwandan coffee is increasingly recognized as a high-quality product, one for which importers such as Solberg and Hansen and in turn, consumers, are willing to pay a premium Although the Rwandan economy is diversifying, agriculture continues to be the primary source of livelihood for 90 percent of the population. The overwhelming majority of these are subsistence farmers. Just over 10 percent of these farmers planted coffee in 2008 and the crop remains a major source of export revenue, generating over 36% of total export revenue in 2009 with projections for this figure to be higher in 2010.

2.0 Production

The bulk of Rwanda's coffee is grown by around 400,000 poor small-scale farmers, each owning less than one hectare of land. Rwanda's production has remained highly cyclical and average levels have not risen since 2002. In 2003, the over 25 percent drop in production (to 14,000 tons) was attributed to disease, a longer than usual dry season and a shorter rainy season. In 2004, actual production was 29,000 tons; 2005 again saw a drop in production to 18,609 tons; while 2006 saw a 30% increase in production at 26,500 tons; 2007 again saw a drastic drop to 14,826 tons and the trend continues. Table i below shows the historical data of national coffee production (tones) from the Coffee Board of Rwanda and coffee cultivation surface areas.

Table i: Historical Coffee Production and Yields

Year	Production [MT]	Cultivated Area	Yield [Kg/Ha]
2003	14,178	20,000	708.90
2004	28,858	29,000	995.10
2005	18,609	27,000	689.22
2006	26,291	25,000	1,051.64
2007	14,826	24,000	617.75
2008	21,000	24,000	875.00
2009	15,257	24,000	635.71

Source: OCIR Café [Coffee Board of Rwanda] and FAO[1]

[1] *Identifying precisely how much coffee is being produced in Rwanda is difficult. Government figures do not match figures from either the US Department of Agriculture or the FAO. According to a fact sheet from the government's trade statistics, 18,185 tons were traded in 2008. However, a different source quotes the figure as 22,000 tons. The USDA numbers are in 1000 60 kilogram bags, and that*

The sharp drops in production have been widely attributed to industry wide accepted' cyclical nature' of coffee production where one bad year is followed by a good one and visa-versa. However, closer analysis shows that these off years also coincide with unfavorable weather conditions and the prevalence of diseases (see OCIR Café annual reports). Coffee, particularly Arabica, is sensitive to extreme weather conditions such as frost, drought, or wetness which can reduce the volume and value of a crop by up to 50%, as can pests.

2.1 Production Constraints

2.1.1 Good Agricultural and Management Practices

- Poor farming practices mean that seedlings and trees do not live up to their potential. Although, the introduction of Caturra and Catuai varieties, which are generally becoming more popular globally as they have a greater crop yield and are less susceptible to disease than the classic Arabicas, proved not to viable for Rwanda and thus contributed somewhat to low production, it cannot be considered the major factor as Bourbon and Typica remain the largely predominant varieties grown here. Even though these varieties are susceptible to attack by pests and diseases, it is the lack of proper farming practices that render production low. Young coffee trees are delicate plants and require a lot of care (avoidance of too much sun, too much shade, winds, etc.). The farmer who does not look after his new coffee trees properly will not reap a good harvest unless at the very least he weeds, prunes the trees correctly, applies fertilizers and protects the trees from insects and diseases

- OCIR-Café's nurseries are scattered and small in size, which renders their overall monitoring difficult and complicates seedling distribution. While sufficient quantities of seedlings may be being produced, the management, distribution and follow up is not adequate to ensure that the plants take root effectively and become productive. Farmers tend to think that the coffee tree is a robust tree that only requires water and some manure, rather than the careful tending that is needed.

- The reported number of trees planted is in fact the number of seedlings distributed. According to 1999 Census, there were 60.5 million coffee trees of which 25% were over 30years old and of which 7% (4 million trees) were irrecoverable. The 2007 estimated number of trees is over 103 million; however, this figure is unrealistic given recent production sector performances. 103 million trees would produce 74,500 tons of when in fact 14,700 tons were produced, resulting in a mismatch of 59,800 tons.

- One of the reasons for this discrepancy is that the reported numbers are actually the number of seedlings distributed rather than the number of trees planted. Being very delicate, a certain number will not survive transportation from the nurseries to their destination farms and transportation. Another portion, although planted, will not survive to become productive trees because of weather, disease or poor farming practices. It

number is 300 for 2009/10 as opposed to 340 for 2008/09 and 240 for 2007/08. According to the FAO, in 2007 coffee was at 15,219 tons, worth 32,460,000 Rwandan francs, making coffee the number one import in value. I use OCIR Café number in this case

must also be taken into consideration that there is a bi-annual cycle in coffee production and a number of trees that will no longer be productive due to age.

- OCIR-Café and OTF Group research thus estimated that the actual number of productive trees in 2007 is nearly 39 million, of which approximately 17 million were a 100% productive, 14.5 million were in a down cycle and 7 million were 25% productive. These calculations would put 2007 production at 14 million tons of green coffee which is in line with reality.

2.1.2 Application of Fertilizers

Insufficient application of appropriate fertilizers has been a major contributing factor to the stagnation of volume growth and improvement of quality. One of the primary factors responsible for poor quality and low productivity is soil fertility. Farmers did not have a culture of fertilizer application in the past; in the late 1980s, only 7% of farms applied fertilizers to 5% of the cultivated area. Between 1994 and 1998, the EU supported a fertilizer program whereby NGOs and private distributors were loaned fertilizers for distribution to farmers through associations for repayment after harvest, and, as far as coffee was concerned, OCIR Café also imported some fertilizers. Between 1998 and 2005, fertilizer was entirely imported by the private sector. In 2006, 2007 and 2008, fertilizers were again imported by OCIR Café for distribution by Districts and later repayment; however this distribution has also run into problem because applications weren't timely, were used on other crops or/and repayments have been slow.

2.1.3 Agronomist Support to Farmers

- OCIR-Café employs agronomists in every district but they are overstretched. Although there is a field agronomist in every district, the lack of coordination with district officials and other government agencies (RADA and ISAR) together with logistical issues (little equipment, means of transport, physical offices, means of communication, etc.) has constrained their ability to deliver effective technical support.

- Also, agronomists are charged with monitoring the planting and development of seedlings, the distribution and application of fungicides, as well as the distribution and application of fertilizers. This is too broad a mandate for one agronomist operating in an area the size of the district.

- Furthermore, the small size and highly dispersed nature of many plots of land on which coffee is grown has meant that they struggle to reach every farmer or provide the desired level of support.

2.1.4 Pests and Diseases

Pests and diseases may reduce Rwanda's production by as much as 50% a year. Three pests and diseases in particular are causing most of the damage. These are leaf rust, berry borer and antestia. In general farmers are applying pesticides on an annual basis, but this is not having sufficient impact on these pests and diseases. Also, inorganic pesticides are going to no longer be acceptable to certain groups of buyers, especially in the US and Japan and hence, Rwandan farmers must move towards the use of integrated pest management systems.

2.1.5 Membership and Management of Coops

- The bulk of Rwanda's coffee is grown by around 400,000 poor small-scale farmers, however, out of these, only 66,095 are members of either a cooperative or an association[2]. Presently, there are 143 associations and cooperatives in the country, representing only 17% of the farmers with each group consisting of an average of 462 members. Out of these 143 producer groups, only 80 receive support. This low level of membership weakens farmers' organisations and hinders coffee sector training and monitoring initiatives. Small associations are likely to face more capacity constraints, which is particularly a key concern in some areas in Kigali and the Eastern Province.

- Even with the few cooperative in place a variety of management concerns have plagued the cooperatives that many coffee farmers join. One close observer of Rwanda's cooperatives has said: "After 5 years of extensive cooperative capacity building, Rwanda's coffee cooperatives remain surprisingly fragile, unorganized, and dysfunctional."[3] Some cooperatives have mishandled loans. Others have not fulfilled contracts in a timely manner. Some have trouble marketing their products. Some of these problems are the result of a lack of training or financial management skills.

3.0 Internal Coffee Trading

- In the early 1980s, coffee exports were handled by two companies namely RWANDEX and ETIRU and the government had a high capital share in those companies. From 1988 until 1991, OCIR Café was authorized to commercialize coffee. With the liberalization of coffee industry, the local market trade as been undertaken by private operators and coffee growers' associations, which bring the parchment coffee to milling factories. Until 1994, the farm gate price was fixed by the government and remained constant for the whole coffee season. There was a stabilization fund designed to avoid the fluctuation of farm gate prices. In 1994, the fund was cancelled; the price is currently based on the international coffee market.

- OCIR café meets once per week with exporters who are also coffee millers to fix the weekly reference price of parchment coffee. The role of this price is to provide market information to coffee growers who are selling parchment coffee to collectors. The farmers, however, have no role or voice in fixing the reference price. Due to the low level of production, the milling factories operate under capacity and exporters tend to lower the reference price in order to cover their relatively

- The number of middlemen is not as at this stage as they keep changing with season and they are only for ordinary [semi washed coffees].

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[2] *SNV Netherlands Development Organization, Case Studies, 2008*

[3] *The SPREAD 2007 Annual Report, available at: http://www.spread.org.rw/spread_project.php,*

3.1 Internal Trading Constraints

3.1.1 Lack of Price Discrimination for Quality of Cherries

Farmers have little or no incentive to improve cherry quality. Although there is undeniable potential, the quality of cherries has not improved as very little has been done to upgrade farming practices since farmers have had very little reason to do so. First, they receive a set price for their product even if their cherries are of a superior quality to another seller. Second, strong competition for cherries (especially in poor seasons) between coffee washing stations [CWS] and ordinary coffee traders, has ensured that their product has not been turned down regardless of quality. Thus, farmers have neither had to experience the carrot nor the stick.
In 2008, OCIR-Café set the minimum price for cherries at RWF 130. CWS paid a flat rate for cherries, having to accept floaters along with good cherries.

3.1.2 Ordinary or Commercial Coffee Business

- The Ordinary or Commercial coffee business is an important part of Rwanda's coffee industry, but receives little support or recognition. One of the key challenges for the government is the balancing act of ensuring that while there are strong incentives to produce high quality fully washed coffee, these incentives do not destroy the commercial coffee sector. As discussed above, it would not be profitable for Rwanda to produce 100% fully washed coffee, however, the current incentive structures and sector policy discussions, exclude the commercial coffee sector.

- While encouraging the production of fully washed coffee, the role of ordinary coffee needs to be recognized. Although specialty coffee is the key to Rwanda's coffee industry export receipts, it needs to be recognized that not all the cherries are of the quality required to make specialty coffee and that it is thus more profitable to produce ordinary coffee with them, especially at times when C-prices are high and the cost of operating CWS to produce mediocre coffee are also high.

4.0 Primary Processing

- Significant private sector investments in coffee washing stations since 2002, have transformed the coffee industry so that fully washed coffee was almost 20% the total production in 2007 whereas it was less than 1% in 2002. However, it must be noted that significant portion of fully washed coffee is of undistinguished quality and does not receive the higher prices that are crucial for long-term financial stability because best practices, not only for production (see discussion above), but also for processing and marketing are not uniformly applied.

- At the end of 2007, there were 112 CWS with the capacity to process 60,000 tons of cherries and produce 11,500 tons of parchment coffee but these washing stations only processed 17,500 tons of cherries and produced 3,650 tons of parchment coffee (a little over 3,000 tons of green coffee), which means that they were operating at 30% of their capacity on average.

4.1 Constraints

4.1.1 Under Utilization of Washing Stations

- The processing sub-sector appears to be working under capacity with washing stations operating at 30%. Recent studies[4] done on washing stations showed that, in general, they operate at around 30% of their installed capacity not only because of the unavailability of cherries but also in large part because of inadequate business planning and management (which could also contribute to inflated overall installed capacity estimates).

- The fact that almost all washing stations run under capacity obviously affects their profitability. It also makes it very difficult to make timely and sufficient repayments to the financial institutions which support them in almost all their activities (infrastructure, cherry purchase, processing, exportation, etc) by giving them loans based on the estimated cherries that will be processed.

4.1.2 High Operating Costs

- CWS have been incurring higher operating costs than they should. Not only are input costs [red cherries] high, but CWS in Rwanda also run at higher operating costs than similar operations in the region. This is in part because the sector is relatively new and many washing stations are still learning how to operate effectively. It is also due in part to the fact that Rwandan coffee production is dominated by micro- to small-holders, which leads to higher transaction costs for CWS. Last but not least, it is also due in large part to poor management practices at many CWS.

- Many CWS incur unnecessary transportation costs. For example, not all washing stations apply a hub-and-spoke approach to cherry purchasing, whereby they set up a limited number of collection hubs where farmers can bring their cherries. This leads to transportation costs that are higher than necessary (one washing station that shifted to a hub-and-spoke model in 2006 cut its transportation costs by half).

- The Rwandan CWS sector is notorious for the amount of labor that it uses. Average labor costs of 20 surveyed stations were five times those of an average coffee estate processor in Kenya.

- CWS operations also continue to be hampered by infrastructure constraints, particularly with regard to access to water and good transportation networks. The quality and quantity of water used for fermenting and washing is a key determinant in the final product as is receiving the cherries in a timely fashion. Furthermore, CWS also have limited access to technical support services, such as staff training programs, cupping facilities or market intelligence which reduces their efficacy.

[4] *OCIR-Café and OTF Group research, 2007*

- The financial problems suffered by CWSs have indirectly benefitted commercial coffee traders as it reduced the amount of competition for cherries and also enabled the purchase of cherries during the first half of the season. This decree was not strictly enforced by Districts who correctly reasoned that it was better for farmers to be able to sell their cherries to someone, rather than not sell them at all. Districts also continue to see an incentive for themselves in encouraging commercial coffee, because they receive tax revenues from this coffee but not from Fully Washed coffees.

- The financial problems and low number of cherries available also encourage CWSs to produce commercial coffee. Many washing station owners also turn to processing of commercial coffee in times where they have limited funds to finance the Fully Washing process. Producing commercial coffee allows CWSs to pay bank interest and survive another season while waiting for sufficient yields and financial support. However, in the longer-term the low production of Fully Washed Coffee will diminish Rwanda's newly achieved prominence among coffee buyers as a source of specialty and fine coffees.

4.1.3 Cut Throat Competition for Cherries

- CWS and ordinary processors compete for cherries, especially when there is a production crisis. Without sufficient cherries to process CWSs struggle to bring in enough revenues to cover their costs, let alone to provide for their working capital needs in the next season. Instead, they rely on loans and credit to provide their working capital. In 2007 this was a particularly grave problem, as there was very low production of coffee cherries and so heightened competition among traders and CWSs. The CWSs tended to lose out to the more experienced traders, as they are less able to provide upfront payments, to extend credit or to collect from very rural areas.

- For CWSs therefore, 2007 was a particularly tough year financially and loan repayments have in many cases not been met with a knock-on effect that their applications for loans in 2008 were delayed. In some cases CWSs provided very weak financial reports and so further discouraged banks from loaning more money; creating a negative spiral of less money available to buy cherries, hence lower production and revenues and less ability to pay back loans. This meant that many CWSs were unable to purchase cherries during the first half of the 2008 season because of a lack of working capital.

4.1.4 Distribution of Washing Stations

Although there are over 100 coffee washing stations in the country, many farmers still do not have access to these processing facilities and so process cherries at home. Traditionally Rwandan farmers removed the fruit of their cherries either with a hand-pulper or, perhaps, using rocks. Beans would then be dried and fermented in buckets, for varying lengths of time, in water of varied quality. As a result, coffee was of lower, industrial quality. This home-processed coffee still makes up the majority of coffee being sold from Rwanda.

5.0 Exports

5.1 Exporters, Export Volumes and Value

In 2008, 46 firms exported coffee out of the registered 54. As can be seen from table ii below, 3 companies exported 68% of the coffee and 6 companies exported 82%. This shows a very high concentration at this level.

Table ii: Exporter Performance – Volume in Metric Tons 2007 – 2008

No.	Producer/Exporter	2007	2008	Total	%-age Share
1	Rwacof	5,093.40	6,107.10	**11,201**	32.54%
2	CBC	3,664.80	5,244.00	**8,909**	25.88%
3	Agrocoffe	950.40	2,240.40	**3,191**	9.27%
4	Enas	605.12	1,077.60	**1,683**	4.89%
5	K.A.C.C	336.00	873.24	**1,209**	3.51%
6	Sopecaf	288.00	904.80	**1,193**	3.47%
7	Rwandex	856.44	-	**856**	2.49%
8	Kinunu	285.60	435.98	**722**	2.10%
9	Coopac	145.70	380.46	**526**	1.53%
10	Gatare Coffee	115.50	394.20	**510**	1.48%
11	Rwanshosco	270.84	226.98	**498**	1.45%
12	Horizon	94.80	330.14	**425**	1.23%
13	Karengera	245.70	175.80	**422**	1.22%
14	Misozi C,	210.12	107.39	**318**	0.92%
15	Kayco	98.40	211.50	**310**	0.90%
16	Shenga Coffee	87.36	144.00	**231**	0.67%
17	MIG	84.60	129.98	**215**	0.62%
18	Rwabisindu C,	76.00	100.80	**177**	0.51%
19	RMC	94.80	76.80	**172**	0.50%
20	Caferwa	158.88	-	**159**	0.46%
21	Ncmc	97.68	42.90	**141**	0.41%
22	RCG	76.80	36.00	**113**	0.33%
23	Coproca	21.06	81.60	**103**	0.30%
24	African It	-	100.80	**101**	0.29%
25	Seven Lakes	74.40	19.20	**94**	0.27%
26	Cooproficag	19.20	57.60	**77**	0.22%
27	Ingoboka	36.54	38.40	**75**	0.22%
28	Lifemate	-	74.40	**74**	0.22%
29	Ngoma-Nyamasheke	-	67.02	**67**	0.19%

30	Rusizi Speciality Coffee	-	57.60	**58**	0.17%
31	Cotecaga	19.20	38.40	**58**	0.17%
32	Nyungwe ,C	19.20	38.40	**58**	0.17%
33	Sake,C	38.40	19.20	**58**	0.17%
34	Mwasa,C	55.20	-	**55**	0.16%
35	Coakamute	9.60	38.40	**48**	0.14%
36	Soprocaf	-	39.58	**40**	0.11%
37	Cotecacya	19.20	19.20	**38**	0.11%
38	Massoud Group	18.00	18.00	**36**	0.10%
39	Sonicof	16.92	16.92	**34**	0.10%
40	Ocir	1.92	27.00	**29**	0.08%
41	Bufcoffee		25.31	**25**	0.07%
42	Kabuye-Maraba	19.20	2.16	**21**	0.06%
43	Sdlmj-Gihundwe	-	20.25	**20**	0.06%
44	Inkingi	19.20	-	**19**	0.06%
45	Nyamatete;C	19.20	-	**19**	0.06%
46	MC	18.00	-	**18**	0.05%
47	Ucar	7.02	-	**7**	0.02%
48	Iakb	4.62	-	**5**	0.01%
49	Bukonya Coffee	1.80	1.20	**3**	0.01%
50	Bicumbi	-	1.90	**2**	0.01%
51	Dukundekawa-Musasa	-	1.02	**1**	0.00%
52	Muyongwe	-	1.02	**1**	0.00%
53	Nyaburemera-Abaryoshyakawa		0.98	**1**	0.00%
54	Sovu-Maraba	-	0.78	**1**	0.00%
	Total	**14,374.81**	**20,046.39**	**34,421**	

Source: OCIR Café; Calculations by Africa Coffee Academy

5.2 Coffee Destinations and Values

5.2.1 Destinations by Volume

Table iii below shows the exports of Rwanda by destination. The major destinations are Switzerland, France, Germany and Belgium. USA and England are also significant while China and Japan are emerging.

Table iii: Exports by Destination and Volume 2007 and 2008

No.	Destination/Year	2007	2008	Total	%-age Share
1	Switzerland	5,928.50	10,692.36	**16,620.86**	48.31%
2	France	36.00	5,664.00	**5,700.00**	16.57%

3	Germany	3,432.36	2,110.56	**5,542.92**	16.11%
4	Belgium	3,762.78	318.30	**4,081.08**	11.86%
5	USA	687.52	276.11	**963.62**	2.80%
6	England	467.04	457.42	**924.46**	2.69%
7	ITALY	25.20	134.40	**159.60**	0.46%
8	China	-	93.60	**93.60**	0.27%
9	JAPAN	0.50	90.76	**91.26**	0.27%
10	NETHERLAND	15.00	54.75	**69.75**	0.20%
11	Other	1.92	65.58	**67.50**	0.20%
12	KENYA	-	38.40	**38.40**	0.11%
13	CANADA	-	19.58	**19.58**	0.06%
14	OMAN	-	18.00	**18.00**	0.05%
15	NORWAY	-	11.57	**11.57**	0.03%
16	IRELAND	-	1.01	**1.01**	0.00%
	Total	**14,356.81**	**20,046.39**	**34,403.21**	

Source: OCIR Café, 2008.

5.3 Constraints

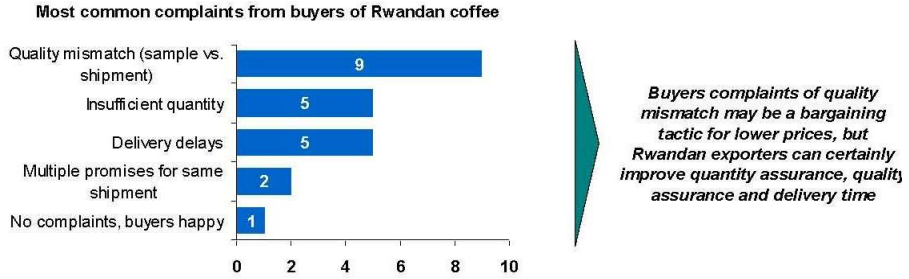
5.3.1 Bureaucratic Processes for Export

Bureaucratic processes for exporting both fully washed [FW] and ordinary coffee are burdensome. Currently, export of FW and ordinary coffee is sometimes unnecessarily delayed. For example, to obtain a Phyto-Sanitary certification (necessary for export), the person issuing the document needs to testify as to the sanitary condition of the coffee to be exported but it is not always easy to even locate the person. The process of exporting coffee is further encumbered by drawn out processes of getting the necessary documentation and official stamp from the Ministry of Agriculture.

5.3.2 Unreliable Delivery on both Quality and Quantity

Unreliable sales delivery both on quantity and quality risks undermining existing relationships and Rwanda's coffee brand. A recent survey of coffee exporters, conducted by OTF group, showed that their buyers' primary complaint was that contractually agreed upon quality, quantity and delivery time were not respected. Figure i illustrates results from the survey.

Figure i. Exporter Survey of Most Common Buyer Complaints



Respect of contractual terms is essential to buyers. Some buyers, who tried, were impressed by, and bought Rwanda coffee in 2005 cancelled deliveries in 2006 because of this. In fact, some buyers claimed to have received their shipments 6 months after they were due. Needless to say, this type of conduct will change a buyer's enthusiasm for the product, regardless of their belief in its potential quality.

6.0 Rwanda Value Chain Participants

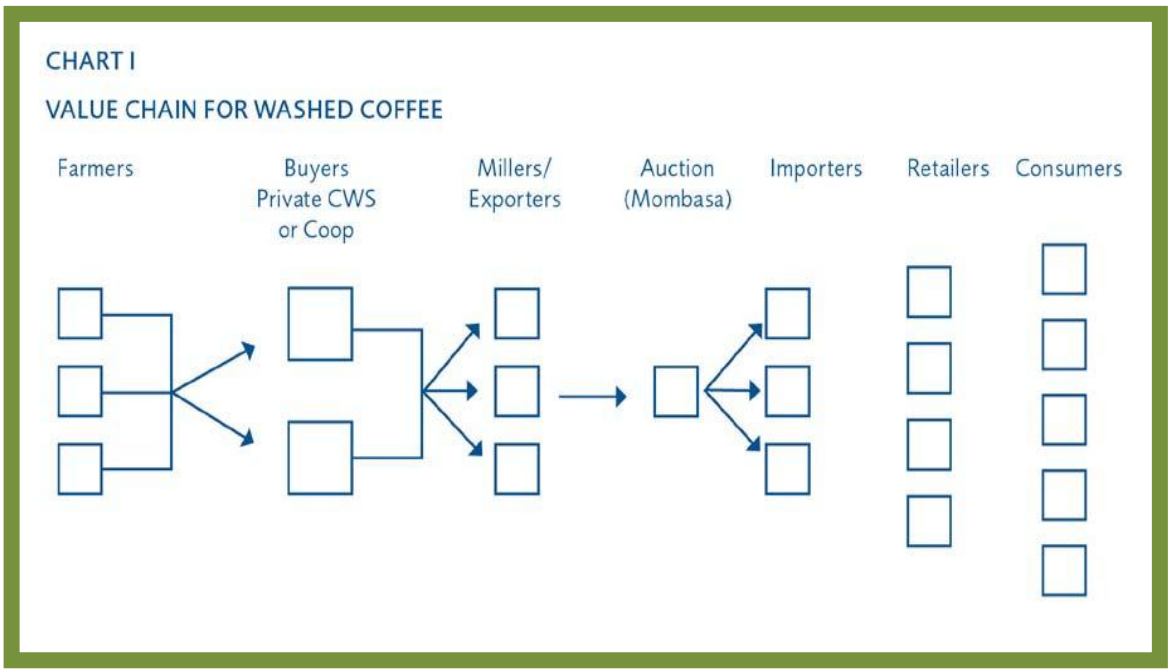
Before the liberalization of coffee marketing in 1995, all coffee was sold to RWANDEX, either directly through their field agents or through middlemen. As mentioned earlier, a producer price was fixed by OCIR-CAFÉ at the beginning of the production season, based on price expectations of the international market and estimations of production costs throughout the production chain, from farmer to exporter. RWANDEX then dry milled the coffee5 in one of their two large milling complexes (Kigali, Gisenyi). No price differential was accorded to quality.

In 1995, the new government opened the coffee market to competition. New exporters established operations. Some of the exporting firms are partially owned by European coffee importers, mainly from Belgium, which facilitated supply chain management. Exporters directly finance middlemen, thereby shifting bank credit risk from middlemen to the more financially solvent exporting firms.

Today, the government is less directly involved in the coffee sector. Farmers have more choice about what to grow, whom to sell their beans to, and how to market their product. Rather than dictate a single price for the entire season OCIR-Café (now known as the Rwanda Coffee Development Authority), sets a minimum weekly reference price, in consultation with stakeholders, a basis from which a sales price per kilo may be negotiated.

Private traders/exporters handle about 70% of the volume exported with 30% being handled by the cooperatives.

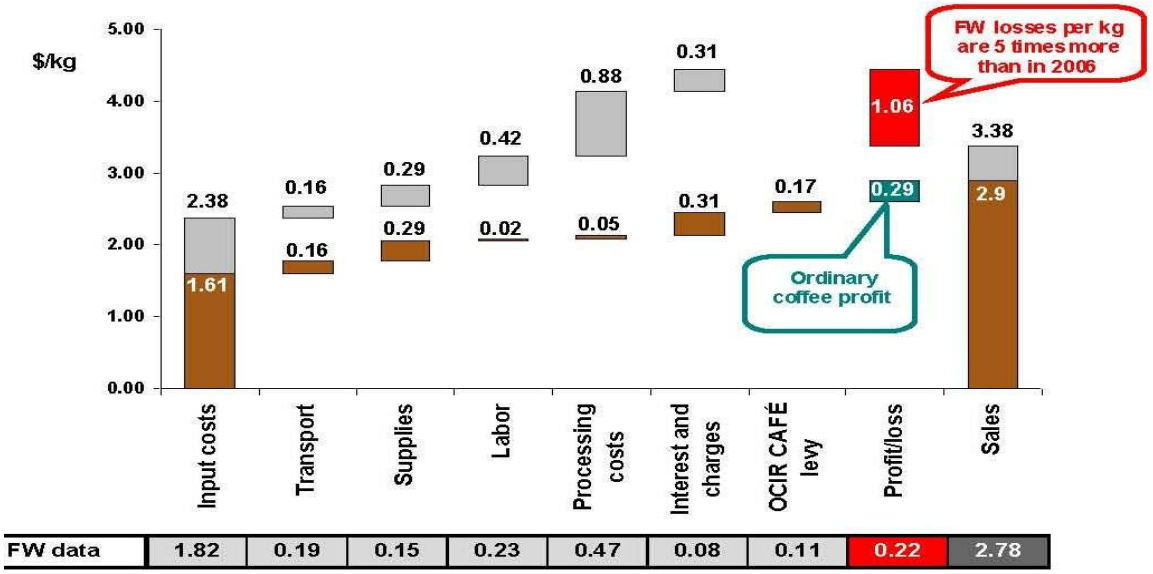
Figure ii: Rwanda Coffee Supply Value Chain Flow Matrix



7.0 Rwanda Coffee Value Chain Costs

Figure iii illustrates the costs incurred in production of a kilo of washed and ordinary coffee respectively. Input costs refers to the cost of red cherry [green equivalent cost] or dry cherries [green coffee equivalent]. Costs in black are for the fully washed coffees while the brown refer to semi washed coffee [ordinary] costs.

Figure iii: Fully Washed and Ordinary Coffee Costs 2007/2008[5]



[5] *Source: OTF Coffee Washing Station survey – June/July 2008 (2007 production), n=29 and OTF Coffee Washing Station survey March 2007 (2006 production), n=20.*

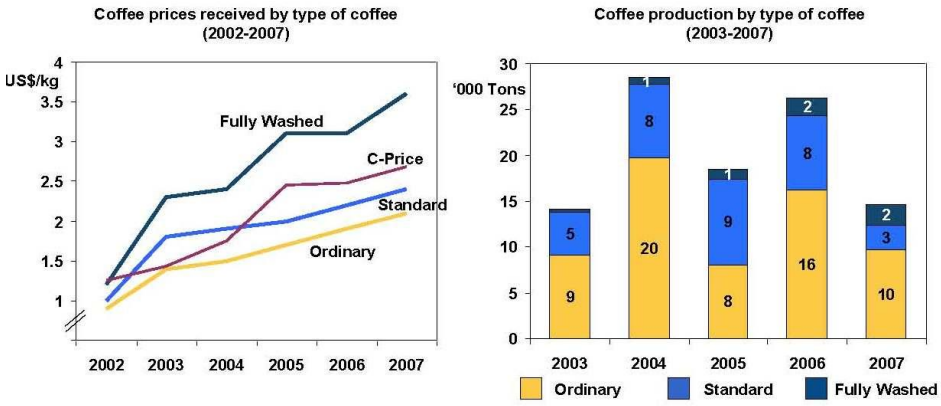
8.0 Opportunities in the Rwanda Coffee Industry

- Rwanda has created tremendous demand for its high quality bourbon Arabica. There is no question that Rwanda Coffee has taken the world by storm in a remarkably short period of time and generated praise by the American and European specialty coffee industry; in fact many coffee professionals believe that the country could produce some of the world's best coffees if it continues at this rate of progress. Specialty coffee buyers, originally flown to Rwanda by donor projects, now make regular trips to Rwanda at their own cost. In the last semester of 2007, Starbucks committed to opening branch office in Kigali and became operational as of August 2008, the first in East Africa.

- There is still significant opportunity for Rwandan coffee in this segment as much of the high quality Arabica cherries being produced are not yet being fully washed. Fully washed coffee being produced in Rwanda now [2009] accounts for 20% of the annual crop, versus 1% in 2002. A greater concern is that washing stations and cooperatives need to do more improve technical capacities and operate profitably, creating incentives for more farmers to choose to sell cherries for washing rather than processing cherries themselves at home.

- Figure iv below shows the changes in production and prices of different types of coffee 2002-08. Despite little overall growth in the quantity of fully washed coffee being produced, Rwanda's coffee industry has gained a positive profile.

Figure iv: Coffee Prices Received by type of Coffee and Coffee Production by Type (2003-2007)



Rwanda has revised their projections for average production to 33, 000 tons and their target for fully washed coffees to 63% of total production – this gives the potential of the specialty coffee to about 40% of total production up from now 10% which is being traded as specialty now [Not all fully washed coffees do not qualify as specialty].

Table iv: Rwanda Country Level Data (2003 -2008)

Year	2003	2004	2005	2006	2007	2008
Coffee Production (Tons)	14,175	28,858	18,609	26,291	14,826	21,000
Coffee production (fully washed-tons)	334	726	1,100	3,100	3,150	4,800
Coffee exports (Tons)	14,725	28,858	18,609	26,491	13,648	21,000
Coffee's export value (Millions USD)	15.00	32.30	39.00	54.00	30.20	46.70
Ordinary [semi washed] coffee (USD/Kg)	1.24	1.16	2.00	2.07	2.20	2.40
Fully washed (USD/Kg)	1.60	2.32	2.70	3.00	3.20	3.40
Percentage of Fully Washed in Exports	**2.27%**	**2.52%**	**5.91%**	**11.70%**	**23.08%**	**22.86%**

Source, OCIR Café, Industry Interviews by ACA

Table iv above shows the premium of fully washed coffees over semi washed – ordinary coffees. The premium averages at least US$1/kg.

9.0 Conclusions and the Way Forward

9.1 At Production Level

- **Agronomic support;** improving this situation may require a radical change, with agronomists being recruited; seedlings grown and distributed; as well as fertilizer and fungicides being distributed, all at the level of the coffee washing stations [CWS] rather than at the district. This could be beneficial as the CWSs recognize the benefits to ensuring that good farming practices, fertilizers and fungicides are used in their area. A secondary focus should be on ensuring that Districts also recognize the benefits of proper monitoring of coffee inputs distribution, perhaps through adding new targets to the District Development Plans.

- **Fertilizer use;** the Government needs to ensure that appropriate fertilizers are available and accessible for coffee farmers and OCIR Café must create an increased demand at farmer level. The government addressed this issue by developing a strategy for distribution of fertilizers in 2007 whereby market-based mechanism would be established for the private sector to take on distribution. However, given that currently NPK 20-10-10 is the only blend being imported for coffee, soil testing will need to be undertaken in different regions to determine the exact deficiencies and capacity for blending of fertilizers in country should be established. While the GOR implements its fertilizer strategy, small hold farmers will still need to be supported in applying fertilizers, at least for a transitional period. If OCIR-Café continues to distribute fertilizers to all coffee farmers until there is an adequate demand and supply, the best way to be reimbursed by farmers would be through the cherry price and this would also provide incentives for them to use the fertilizer on their coffee.

- **Investments need to be made to increase farming efforts**. The emphasis lately has been on CWS and there needs to be a better balance between production and processing. Although some NGOs and Donors have invested some efforts into improving production (TECHNOSERVE and Clinton Foundation for example), this needs to become a standard policy in Rwanda. Perhaps it should become mandatory for any coffee program to invest a percentage in improving farming practices.

9.2 At Internal Trading Level

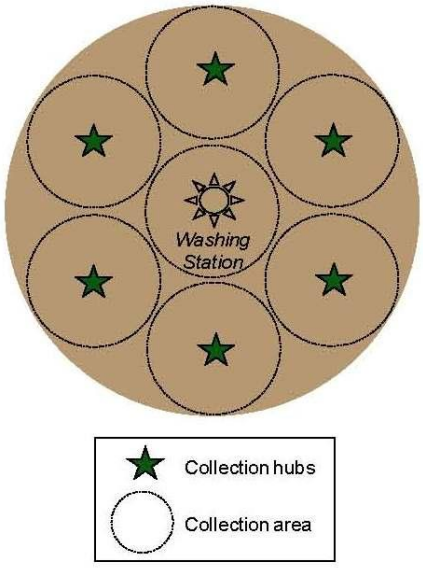
- A policy for an incentive system must be adopted to entice farmers into making the investments necessary to produce the quality outputs required for Rwanda's quality focused coffee strategy. The ability to pay different prices for different quality levels of a product is the most important incentive for producers to invest in upgrading its quality. Shielded from any variable pricing, the only way they will be able to earn higher revenues will be by increasing output volume. Without quality-based variable pricing, they will in fact be tempted to skimp on the even basic investments required to maintain normal product quality standards. Some CWS have in fact put in place such an incentive plan but this needs to be adopted as policy at a national level.

9.3 At Primary Processing Level

- CWSs can reduce the cost of operations and increase profits if they are properly managed. Reducing transportation costs to what is only necessary and hiring skilled labor will dramatically reduce costs. These will also positively impact the quality of the end-product and thus increase profitability again. Hub-and-spoke systems, for example, will also reduce the time between when cherries are picked and when they are washed and minimizing this time is crucial for reducing fermentation and thus increasing quality. Professionalizing labor will also improve product quality as staff will be more likely to use good washing practices, such as better cherry selection ensuring that the coffee on drying tables is constantly turned and that triage is undertaken prior to the coffee being sent for milling.

- With some investments in road networks, increasing the number of coffee bikes and using a hub-and-spoke system will alleviate some of the transport issues. In areas where they have been distributed, coffee bikes have reduced quality concerns due to poor transportation systems (assuming there is some road network in place) as these specially designed bikes can carry up to 300 lbs of cherries up even steep rural mountain roads. As mentioned earlier, a hub-and spoke approach can also significantly reduce transportation costs and help prevent the deterioration of cherry quality. In 2007, Project Rwanda estimated that US$0.15/lb or higher could be received for green coffee if the time required for transport of berries from field to washing station were reduced from 6-12 hours to 2-4 hours39. OCIR- Café has a key role to play in working with donors and MININFRA to encourage the uptake of these bikes and the use of such a hub and spoke systems as shown by

Figure v: Improving transport of coffee cherries[6]



- **Transportation time:** decreased from 6-12 hours (by truck) to 2-4 hours (by bike)
- **Increased premium price:** $0.15-$0.20/lb
- **Distance:** covers 4 times the distance in the same unit of time
- **Carrying capacity:** increased by 5
- **Cost saving:** a truck costs at least $1,900/month

- Ensuring profitable operations and good management of CWS should be a national initiative. Currently, some washing stations are assisted by NGO and donor programs, such as SPREAD, Technoserve, SNV, etc., and are doing well but these efforts need to be spread nationally and take root so that skills are transferred and CWS will continue to reap the benefits when these programs come to term.

- In times of high Semi-Washed coffee prices on the international market, the premium for fully washed coffee is squeezed and CWSs may need to select only the best quality cherries for fully washing in order to maximize their profits. For some of Rwanda's more inefficient Coffee Washing Stations (CWSs) the costs of fully washing the coffee could become much higher than the premium that is received for doing so. Hence Rwanda's output of fully washed coffee should vary depending on the premium received for fully washed coffee over commercial coffee. Where Coffee Washing Stations have high costs, they may find it more profitable to sell commercial coffee during periods of high C-Prices. It may also be more profitable to sell ordinary coffee in years of low production, as this tends to result in lower quality and fewer cherries being available for the washing stations, thus reducing the premium received for washing and spreading the costs of washing on fewer kilograms of green coffee.

9.4 At Export Level

- Export processes need to be streamlined. It is essential that exporters be able to export their products as quickly and easily as possible as this will also improve sales management and customer service relationships with buyers abroad. One solution might

[6] *Source: OTF Group survey 2006*

be to enable exporters to work with one parastatal office (either in RIEPA or OCIR Café) who would be responsible for the obtaining the necessary paperwork and coordination with government offices.

- Rwanda coffee traders must meet buyer expectations by being reliable, consistent and building strong relationships with buyers. While price and branding have also become more important in recent years in selling a product, Rwanda needs to get these basics right first. Buyers need to get the expected and agreed upon quantity and quality in a timely fashion and there should be a follow-up with buyers to assess their satisfaction and build loyalty.

- Despite the greater profitability of ordinary coffee at certain times, Rwanda must take care not to strain relationships with fully washed coffee buyers. If a CWS with long-term relationships suddenly switches one year to producing ordinary coffees and then back to producing fully washed coffee the next year, they are unlikely to sustain these crucial buyer relationships.